

**WHAT IS CLAIMED IS:**

1. A wireless communication apparatus with built-in terminal hub for transmitting a wireless signal, comprising:

a PCB (Printed Circuit Board);

5 a built-in antenna module disposed on the PCB for transmitting the wireless signal; and

an input terminal hub coupled with the PCB for connecting a computer.

2. The wireless communication apparatus according to claim 1 further comprising:

10 an output terminal hub coupled with the PCB for connecting a peripheral device.

3. The wireless communication apparatus according to claim 1, wherein the computer uses the wireless communication apparatus to communicate with an outside computer equipped with another wireless communication apparatus.

15 4. The wireless communication apparatus according to claim 1, wherein the computer uses the wireless communication apparatus to receive the wireless signal from a wireless control device.

5. The wireless communication apparatus according to claim 4, wherein the

wireless control device is a cordless mouse.

6. The wireless communication apparatus according to claim 4, wherein the wireless control device is a wireless keyboard.

7. The wireless communication apparatus according to claim 1 further comprising:

a casing for containing the PCB and the built-in antenna module to protect the configuration inside the wireless communication apparatus.

8. The wireless communication apparatus according to claim 1, wherein the input terminal hub is an USB (Universal Series Bus) terminal hub.

9. The wireless communication apparatus according to claim 2, wherein the output terminal hub is an USB (Universal Series Bus) terminal hub.

10. The wireless communication apparatus according to claim 1, wherein the input terminal hub is a PS2 terminal hub.

11. The wireless communication apparatus according to claim 2, wherein the output terminal hub is a PS2 terminal hub.

12. The wireless communication apparatus according to claim 1, wherein the transmission of the wireless communication apparatus is a one-way signal transmission.

13. The wireless communication apparatus according to claim 1, wherein the transmission of the wireless communication apparatus is a two-way signal transmission.

14. The wireless communication apparatus according to claim 1, wherein the wireless communication apparatus is a one-way 2.4 GHz multiple-channel FM/ FSK receiver.

15. The wireless communication apparatus according to claim 1, wherein the wireless communication apparatus is a regenerative low power-consumption one-way receiver.

16. The wireless communication apparatus according to claim 1, wherein the wireless communication apparatus is a two-way 900 MHz/2.4GHz spread spectrum transceiver.

17. The wireless communication apparatus according to claim 1, wherein the wireless communication apparatus employs a Bluetooth solution.

18. The wireless communication apparatus according to claim 1, wherein the built-in antenna module is a phase matrix antenna module.

19. The wireless communication apparatus according to claim 18, wherein the phase matrix antenna module is designed by an aluminum foil of a baseboard.